

## **LITHIUM (ESKALITH®, LITHOBID®, ESKALITH CR®, etc.)**

### **INDICATIONS**

- 1) Bipolar disorders and other cyclic mood disorders
- 2) Augmentation of antidepressant therapy for major depressive disorders
- 3) Aggressive behavior secondary to a psychiatric disorder

### **PRECAUTIONS TO CONSIDER**

#### **Contraindications**

##### *Absolute:*

- 1) History of anaphylactic reaction or similarly severe significant hypersensitivity to the medication prescribed

##### *Relative:*

- 1) Severe cardiovascular disease
- 2) Severe dehydration
- 3) Pregnancy/nursing mothers
- 4) Severe renal insufficiency
- 5) Hyperparathyroidism
- 6) Severe hyponatremia

#### **Precautions**

- 1) Diagnosis of a seizure disorder
- 2) Parkinson's disease
- 3) Dehydration
- 4) Severe infections
- 5) Dementia, brain injuries
- 6) Urinary retention
- 7) Thyroid disorders
- 8) Dermatological conditions (Psoriasis, acne, hair loss and other skin eruptions)
- 9) Goiter
- 10) Concomitant use of thiazide diuretics
- 11) Concomitant use of ACE Inhibitors, ARBs
- 12) Concomitant use of NSAIDs
- 13) Gastrointestinal symptoms (nausea, diarrhea, vomiting)
- 14) Syncopal episodes
- 15) Neurological symptoms (tremors, ataxia, dysarthria, parkinsonism)

#### **Pregnancy and Breast-Feeding**

See relative contraindications. FDA Pregnancy Category D. Lactation Risk L4.

#### **Drug Interactions of Major Significance**

- 1) Thiazide diuretics
- 2) Non-steroidal anti-inflammatory drugs (except sulindac, low dose aspirin)
- 3) Iodine containing substances
- 4) Antipsychotics
- 5) ACE Inhibitors, ARBs
- 6) Serotonergic agents
- 7) Topiramate

## **PRECAUTIONS TO CONSIDER**

### Age-Specific Considerations

- 1) Monitoring of skeletal development and calcium levels in children if chronic lithium therapy is advised.
- 2) Geriatric patients usually require lower doses and more frequent monitoring.

### Side Effects Which Require Medical Attention

- 1) Weight gain
- 2) Edema
- 3) Thyroid disorders (hypothyroidism, hyperthyroidism)
- 4) Slurred speech
- 5) Drowsiness, lethargy
- 6) Nausea, vomiting, diarrhea
- 7) Ataxia
- 8) Tremors
- 9) Polydipsia
- 10) Polyuria
- 11) Headache
- 12) Parathyroid disorders
- 13) Renal impairment
- 14) Cardiac conduction abnormalities
- 15) Dermatological conditions (acne, hair loss)
- 16) Cognitive impairment
- 17) Mental status changes (disorientation, confusion)

## **PATIENT MONITORING**

### Patient Monitoring Parameters

- 1) EKG (mandatory for everyone) – baseline, yearly and as clinically indicated
  - 2) CBC – baseline, yearly and as clinically indicated
  - 3) Thyroid studies – baseline; then TSH every 6 months and as clinically indicated
  - 4) Comprehensive Metabolic Panel (BUN, creatinine, glucose, calcium, and electrolytes)- baseline, 3 months, annually and as clinically indicated. Caution: BUN:serum creatinine ratio >20 maybe an indication of dehydration.
  - 5) UA - baseline and as clinically indicated
  - 6) Pregnancy Test - as clinically indicated
  - 7) Lithium Levels – one week (i.e., 5-7 days) after initiation or dosage change, 3 months after initiation, and as clinically indicated; for maintenance treatment every 6 months, and as clinically indicated
  - 8) Weight – baseline, every 6 months and as clinically indicated
- Usual trough therapeutic level: 0.6-1.5 meq/L (12 hour post dose)
  - Therapeutic ranges for the lab used should be listed on the report.

### Dosing

- 1) Take with food to avoid stomach upset
- 2) See DSHS/DADS Drug Formulary for dosage guidelines.
- 3) Exceptions to maximum dosage must be justified as per medication rule.